SPAWAR
Systems Center
San Diego

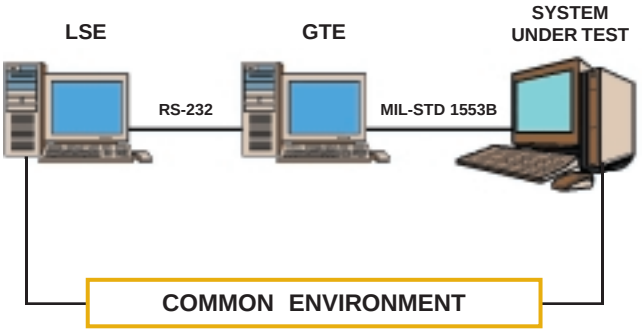
DATA LINK TEST TOOLS

Link-16 Engine

TOOLS TO SUPPORT TADIL SYSTEMS TESTING

The Link-16 Engine (LSE) is one in a family of Data Link Test Tools (DLTT) designed to facilitate Tactical Digital Information Link (TADIL) integration and interoperability testing and training. Its primary use is as a Link-16 message generator to a Data Link Gateway (DLGW) network. The LSE also can interface with external systems to provide a coordinated TADIL picture. The tool provides an extensive geographic tactical situation display of host-generated information, along with the tracks it generates.

The LSE also can be used in conjunction with the DLGW as a tool to enable a Link-16 system under test (SUT) to facilitate "stand-alone" testing. The LSE provides the timely transmission of specific messages either by generating these messages itself or by interfacing to an external system through predefined formats supported by the LSE.



LSE can be Interfaced to an External Environment to Provide TADIL Coincident Data

FEATURES/CAPABILITIES

- Useable as an integration tool for non-Link-16 systems (as part of a DLGW network)
- User-friendly graphical interface
- Generates TADIL J/Link-16 messages
- Extensive Geographic Tactical Situation display of host-generated information and LSE-generated tracks
- Breaks out all TADIL J messages (MIL-STD 6016A)
- Breaks out Data Extraction and Reduction Guide (DERG) messages
- Compliant with the Standard Interface for Multiple Platform Link Evaluation (SIMPLE)
- Provides tracking and motion features (operator can control local tracks)
- Collects and redisplays operational data
- Processes script scenarios

APPLICATIONS

- Host development testing
- Interoperability testing
- System validation
- Connectivity for live testing
- Deployment testing
- Proof-of-concept testing
- On-line analysis
- Crew training
- Mission monitoring
- Mission evaluation
- Impact analysis
- Demonstrations

SYSTEM COMPONENTS/SUPPORT

Data Link Test Tool (DLTT) systems are configured at Space and Naval Warfare Systems Center, San Diego (SSC San Diego). Modular design and open architecture allow for flexibility and rapid integration of new interfaces and capabilities to suit user needs. The LSE application package includes:

- High-speed computer (Pentium), monitor, keyboard
- Removable hard drive and floppy drive
- Timing board, I/O boards and host terminal interface board
- Operating system software
- LSE program software

The DLTT Program Office provides full and flexible support services for users, including system configuration, installation, training, ongoing technical support, and program upgrade options.

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FURTHER INFORMATION

Data Link Test Tools are a family of applications developed and maintained by the Space and Naval Warfare Systems Center, San Diego, (SSC San Diego), Code D45, to facilitate TADIL integration and interoperability testing.

Further information on the Data Link Gateway system, other Data Link Test Tools and data link testing facilities/services at SSC San Diego is available at the following:

DLTT Web Site: http://gateway.spawar.navy.mil

Send email to: gwinfo@spawar.navy.mil

Telephone (toll free in the U.S.): 1-888-GWLinks (495-4657)

Points of Contact

DLTT Program Manager
Space and Naval Warfare Systems Center, San Diego
Code D45
53560 Hull Street
San Diego, CA 92152-5001
USA
Telephone: (619/DSN) 553-3224
FAX: (619/DSN) 553-8221

DLTT Application Engineering Support
Space and Naval Warfare Systems Center, San Diego
Code D4524
53560 Hull Street
San Diego, CA 92152-5001
USA
Telephone: (619/DSN) 553-2601 or (619/DSN) 553-6094
FAX: (619/DSN) 553-8221

DLTT Foreign Military Sales
Space and Naval Warfare Systems Center, San Diego
Code D4524
53560 Hull Street
San Diego, CA 92152-5001
USA
Telephone: (619/DSN) 553-9766 or (619/DSN) 553-9401
FAX: (619/DSN) 553-8221

DLTT System Purchase Support
Space and Naval Warfare Systems Center, San Diego
Code D4524
53560 Hull Street
San Diego, CA 92152-5001
USA
Telephone: (619/DSN) 553-9401 or (619) 553-0033
FAX: (619/DSN) 553-8221 or (619) 553-6773

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